WHAT IS CLAIMED IS:

1. A semiconductor device having a multi-chip package structure, the semiconductor device comprising:

a lead frame;

a first integrated circuit chip attached to a top surface of the lead frame by a conductive adhesive, wherein the first integrated circuit chip does not have a passivation layer on a top surface of the first integrated circuit chip; and

a second integrated circuit chip attached to the top surface of the first integrated circuit chip by an insulating adhesive tape.

2. The semiconductor device of claim 1, wherein the second integrated circuit chip is directly attached to a top surface of the first integrated circuit chip by an insulating adhesive tape.

3. The semiconductor device of claim 1, wherein the first integrated circuit chip comprises a switching device.

4. The semiconductor device of claim 1, wherein the second integrated circuit chip comprises a control device.

5. The semiconductor device of claim 1, wherein the conductive adhesive comprises solder.

6. The semiconductor device of claim 1, wherein the insulating adhesive tape has a single-layered structure comprising a polyimide base resin.

7. The semiconductor device of claim 6, wherein the polyimide base resin comprises thermosetting resin or thermoplastic resin.

8. The semiconductor device of claim 1, wherein the insulating adhesive tape has a multi-layered structure.

9. The semiconductor device of claim 8, wherein the multi-layered structure comprises a first adhesive layer, an insulating layer, and a second adhesive layer.

10. The semiconductor device of claim 9, wherein the first and second adhesive layers comprise a polyimide base resin.

11. The semiconductor device of claim 10, wherein the polyimide base resin comprises thermosetting resin or thermoplastic resin.

12. A power semiconductor device having a multi-chip package structure, the power semiconductor device comprising:

a lead frame;

a switching device attached to a top surface of the lead frame by a conductive adhesive, wherein the switching device does not have a passivation layer on a top surface of the switching device; and

a driving device attached to the top surface of the switching device by an insulating adhesive tape.

13. The power semiconductor device of claim 12, wherein the driving device is directly attached to a top surface of the switching device by an insulating adhesive tape.

14. The power semiconductor device of claim 12, wherein the switching device comprises a transistor chip.

15. The power semiconductor device of claim 12, wherein the driving device comprises a control integrated circuit chip.

16. The power semiconductor device of claim 12, wherein the conductive adhesive comprises solder.

17. The power semiconductor device of claim 12, wherein the insulating adhesive tape has a single-layered structure comprising a polyimide base resin.

18. The power semiconductor device of claim 17, wherein the polyimide base resin comprises thermosetting resin or thermoplastic resin.

19. The power semiconductor device of claim 12, wherein the insulating adhesive tape has a multi-layered structure.

20. The power semiconductor device of claim 19, wherein the multi-layered structure comprises a first adhesive layer, an insulating layer, and a second adhesive layer.

21. The power semiconductor device of claim 20, wherein the first and second adhesive layers comprise a polyimide base resin.

22. The power semiconductor device of claim 21, wherein the polyimide base resin comprises thermosetting resin or thermoplastic resin.

23. A semiconductor device having a multi-chip package structure, the semiconductor device comprising:

a lead frame;

a first integrated circuit chip attached to a top surface of the lead frame by a conductive adhesive, wherein the first integrated circuit chip does not have a passivation layer on a top surface of the first integrated circuit chip; and

a second integrated circuit chip directly attached to the top surface of the first integrated circuit chip by an insulation epoxy adhesive.

24. The semiconductor device of claim 23, wherein the first integrated circuit chip comprises a switching device.

25. The semiconductor device of claim 23, wherein the second integrated circuit chip comprises a control device.

26. The semiconductor device of claim 23, wherein the conductive adhesive comprises solder.

27. The semiconductor device of claim 23, wherein the insulation epoxy adhesive comprises a thermosetting liquid epoxy, and wherein a plurality of beads are included with the insulation epoxy adhesive.

28. The semiconductor device of claim 27, wherein the beads comprise silica.

29. The semiconductor device of claim 27, wherein the beads have a diameter of about 25 μm to about 100 μm.

30. A power semiconductor device having a multi-chip package structure, the power semiconductor device comprising:

a lead frame;

a switching device attached to a top surface of the lead frame by a conductive adhesive, wherein the switching device does not have a passivation layer on a top surface of the switching device; and

a driving device directly attached to the top surface of the switching device by an insulation epoxy adhesive.

31. The power semiconductor device of claim 30, wherein the switching device comprises a transistor chip.

32. The power semiconductor device of claim 30, wherein the driving device comprises a control integrated circuit chip.

33. The power semiconductor device of claim 30, wherein the conductive adhesive comprises solder.

34. The power semiconductor device of claim 30, wherein the insulation epoxy adhesive comprises a thermosetting liquid epoxy, and wherein a plurality of beads are included with the insulation epoxy adhesive.

35. The power semiconductor device of claim 34, wherein the beads comprise silica.

36. The power semiconductor device of claim 34, wherein the beads have a diameter of about 25 μm to about 100 μm.

37. A method of manufacturing a semiconductor device having a multi-chip package, the method comprising:

attaching a first integrated circuit chip to a top surface of a lead frame with a conductive adhesive, wherein the first integrated circuit chip does not have a passivation layer on a top surface of the first integrated circuit chip; and

attaching a second integrated circuit chip to the top surface of the first integrated circuit chip with an insulating adhesive tape.

38. The method of claim 37, wherein attaching a second integrated circuit chip comprises directly attaching a second integrated circuit chip to a top surface of the first integrated circuit chip with an insulating adhesive tape.

39. The method of claim 37, wherein the first integrated circuit chip comprises a switching device.

40. The method of claim 37, wherein the second integrated circuit chip comprises a control device.

41. The method of claim 37, wherein the insulating adhesive tape comprises a polyimide base resin.

42. The method of claim 41, wherein the polyimide base resin comprises thermosetting resin or thermoplastic resin.

43. A method of manufacturing a power semiconductor device having a multi-chip package, the method comprising:

attaching a switching device to a top surface of a lead frame with a conductive adhesive, wherein the switching device does not have a passivation layer on a top surface of the switching device; and

attaching a driving device to the top surface of the switching device with an insulating adhesive tape.

44. The method of claim 43, wherein attaching a driving device comprises directly attaching a driving device to a top surface of the switching device with an insulating adhesive tape.

45. The method of claim 43, wherein the switching device comprises a transistor chip.

46. The method of claim 43, wherein the driving device comprises a control integrated circuit chip.

47. The method of claim 43, wherein the insulating adhesive tape comprises a polyimide base resin.

48. The method of claim 47, wherein the polyimide base resin comprises thermosetting resin or thermoplastic resin.

49. A method of manufacturing a semiconductor device having a multi-chip package, the method comprising:

attaching a first integrated circuit chip to a top surface of a lead frame with a conductive adhesive, wherein the first integrated circuit chip does not have a passivation layer on a top surface of the first integrated circuit chip; and

directly attaching a second integrated circuit chip to the top surface of the first integrated circuit chip with an insulation epoxy adhesive.

50. The method of claim 49, wherein the first integrated circuit chip comprises a switching device.

51. The method of claim 49, wherein the second integrated circuit chip comprises a control device.

52. The method of claim 49, wherein the insulation epoxy adhesive comprises a thermosetting liquid epoxy, and wherein a plurality of beads are included with the insulation epoxy adhesive.

53. The method of claim 52, wherein the beads comprise silica.

54. The method of claim 52, wherein the beads have a diameter of about 25 μm to about 100 μm.

55. A method of manufacturing a power semiconductor device having a multi-chip package, the method comprising:

attaching a switching device to a top surface of a lead frame with a conductive adhesive, wherein the switching device does not have a passivation layer on a top surface of the switching device; and

directly attaching a driving device to the top surface of the switching device with an insulation epoxy adhesive.

56. The method of claim 55, wherein the first integrated circuit chip comprises a switching device.

57. The method of claim 55, wherein the second integrated circuit chip comprises a control device.

58. The method of claim 55, wherein the insulation epoxy adhesive comprises a thermosetting liquid epoxy, and wherein a plurality of beads are included with the insulation epoxy adhesive.

59. The method of claim 58, wherein the beads comprise silica.

60. The method of claim 58, wherein the beads have a diameter of about 25 μm to about 100 μm.